

**AMENDMENTS TO THE CLAIMS:**

The listing of claims will replace all prior versions, and listings of claims in the application:

**LISTING OF THE CLAIMS**

1. (Previously Presented) A method for inhibiting spontaneous myometrial contraction or bradykinin-induced contraction, comprising administering to the patient in need of treatment, a therapeutically effective amount of adrenomedullin.
2. (Previously Presented) A method for selectively inhibiting spontaneous myometrial contraction or bradykinin-induced contraction comprising the step of administering to a patient in need of treatment, a therapeutically effective amount of adrenomedullin.
3. (Currently Amended) A method according to claim 1 or 2, wherein the administration is used to prevent for preventing premature labor, which comprises administering to the patient in need of such treatment, a therapeutically effective amount of adrenomedullin.
4. (Currently Amended) A method according to claim 1 or 2, wherein the administration is used to prevent for preventing miscarriage, which comprises administering to the patient in need of such treatment, a therapeutically effective amount of adrenomedullin.
5. (Currently Amended) A method according to claim 1 or 2, wherein the administration is used to arrest for arresting parturition prior to cesarean section, which comprises administering to the patient in need of such treatment, a therapeutically effective amount of adrenomedullin.

6. (Currently Amended) A method according to claim 1 or 2, wherein the administration is used to treat for treating dysmenorrheal, which comprises administering to the patient in need of such treatment, a therapeutically effective amount of adrenomedullin.

7. (Previously Presented) A method according to claim 1 or 2, wherein the adrenomedullin is:

- (a.) a peptide comprising an amino acid sequence from Ser in position 13 to Tyr in position 52 of SEQ ID NO: 2; or
- (b.) a peptide comprising an amino acid sequence having one or several amino acid deleted, substituted, or added in the amino acid sequence (a), and having an action of inhibiting myometrial contraction.

8. (Currently Amended) A method according to claim [[7]]1 or 2, wherein the adrenomedullin is:

- (c.) a peptide comprising an amino acid sequence from Tyr in position 1 to Tyr in position 52 of SEQ ID NO: 2; or
- (d.) a peptide comprising an amino acid sequence having one or several amino acid deleted, substituted, or added in the amino acid sequence (c), and having an action of inhibiting myometrial contraction.

9. (Currently Amended) A method according to claim [[8]]1 or 2, wherein the adrenomedullin is:

- (e.) a peptide comprising an amino acid sequence from Ala in position -73 to Tyr in position 52 of SEQ ID NO: 2; or
- (f.) a peptide comprising an amino acid sequence having one or several amino acid deleted, substituted, or added in the amino acid sequence (e), and having an action of inhibiting myometrial contraction.

10. (Currently Amended) A method according to claim [[9]]1 or 2, wherein the adrenomedullin is:

- (g.) a peptide comprising an amino acid sequence from Met in position -94 to Leu in position 91 of SEQ ID NO: 2; or
- (h.) a peptide comprising an amino acid sequence having one or several amino acid deleted, substituted, or added in the amino acid sequence (g), and having an action of inhibiting myometrial contraction.

11. (Previously Presented) A method according to claim 1 or 2, wherein the C-terminus of the adrenomedullin is amidated.

12. (Previously Presented) A method according to claim 1 or 2, wherein Gly is added to the C-terminus of the adrenomedullin.

13. (Previously Presented) A method according to claim 1 or 2, wherein in the adrenomedullin, Cys in position 16 and Cys in position 21 of SEQ ID NO: 2 are crosslinked.

14. (Previously Presented) A method according to claim 13, wherein the crosslink is a disulfide bond.

15. (Previously Presented) A method according to claim 13, wherein the crosslink is a -CH<sub>2</sub>-CH<sub>2</sub>- bond.

16. (Cancelled).

17. (Cancelled).